

WASTEWATER SYSTEM

Annual Report



Treatment and Collection Staff Contacts:

Operator in Responsible Charge
of the City of Salisbury WWTP
Robert Loper – 704-216-2728

Operator in Responsible Charge
of Residuals Management
Robert Loper – 704-216-2728

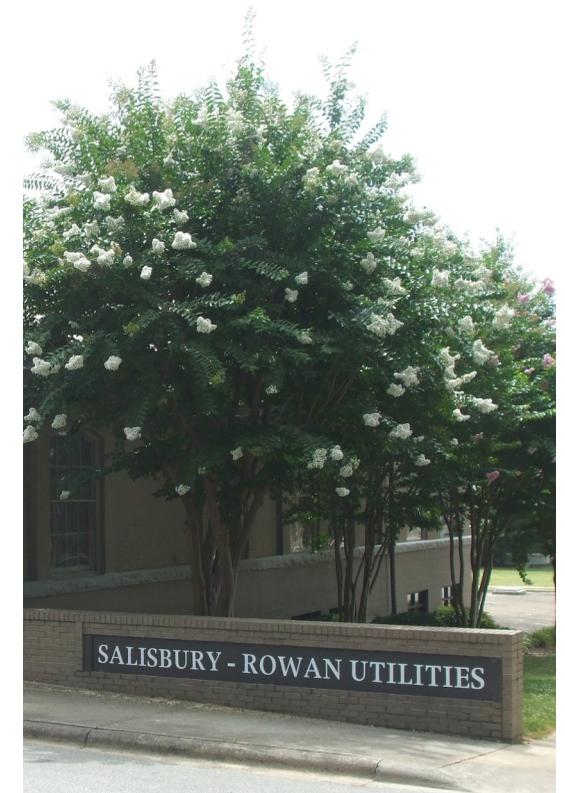
Operator in Responsible Charge
of Collection System
Randy Allman – 704-638-5390

Water Resources Manager
Jim Amaral – 704-216-2736

Laboratory Services Supervisor
Alan Fowler – 704-216-2737

This report covers the calendar year from
January 1 through December 31, 2020
and is available on-line at
www.salisburync.gov.

Any questions pertaining to this report
should be directed to
Environmental Services Manager,
Sonja Basinger at 704-216-7539.



2020

Our mission is CLEAR!

Salisbury-Rowan Utilities Collection System Sanitary Sewer Overflows (Permit WQCS00019)

Date	Location	Gallons	Gallons into stream	Receiving Stream	Cause
1/12/20	Coley Rd Pump Station (GRQ)	1,006	1,006	Church Creek	Power Outage
1/23/20	300 N. Long St (SAL)	7,850	7,850	Town Creek	Pipe Failure
2/6/20	1000 Blk of 7 th St (SPR)	608,100	608,100	Grants Creek	Severe Natural Condition
2/6/20	1700 Blk of W Park Rd (SAL)	29,222	29,222	Grants Creek	Severe Natural Condition
2/6/20	Southside Pump Station (RKW)	237,859	237,859	Dutch Second Creek	Severe Natural Condition
2/6/20	Mill Village Pump Station (CHG)	598	598	Cold Water Creek	Severe Natural Condition
2/13/20	1700 Hollywood Dr (SPR)	150	150	Grants Creek	Manhole Failure
5/5/20	809 S MLK Jr Ave (SAL)	50	50	Town Creek	Pipe Failure
5/21/20	850 Heiligtown Rd (ESP)	16,300	16,300	Town Creek	Severe Natural Condition/ Manhole Failure
5/21/20	2210 Innes St (SAL)	417	417	Crane Creek	Severe Natural Condition / Debris
5/21/20	Southside Pump Station (RKW)	90,873	90,873	Dutch Second Creek	Severe Natural Condition
5/27/20	Mill Village Pump Station (CHG)	2,264	2,264	Cold Water Creek	Severe Natural Condition
5/27/20	Crane Creek Pump Station (SAL)	1,057	1,057	Crane Creek	Severe Natural Condition/ Equipment Failure
6/18/20	Mill Village Pump Station (CHG)	179	179	Cold Water Creek	Severe Natural Condition
7/3/20	529 Wiley Ave (SAL)	75	75	Grants Creek	Pipe Failure
11/12/20	Old 80 Pump Station (GRQ)	359	359	Church Creek	Severe Natural Condition
11/12/20	Mill Village Pump Station (CHG)	620	620	Cold Water Creek	Severe Natural Condition
11/12/20	850 Heiligtown Rd (ESP)	450	450	Town Creek	Severe Natural Condition
11/12/20	304 S. Salisbury St (GRQ)	1,177	1,177	Crane Creek	Severe Natural Condition
11/12/20	1120 S MLK Jr Ave (SAL)	2,422	2,422	Town Creek	Severe Natural Condition
11/12/20	Crowell Pump Station (RKW)	760	760	Dutch Second Creek	Severe Natural Condition
11/12/20	Southside Pump Station (RKW)	106,380	106,380	Dutch Second Creek	Severe Natural Condition
11/30/20	906 7 th St (SPR)	17,500	17,500	Grants Creek	Damaged Manhole
12/21/20	2045 Old Wilkesboro Rd (SAL)	360	360	Grants Creek	Debris / Grease
	Total Gallons	1,126,028	1,126,028		

All discharges of any amount that reach surface waters are reported to the Division of Water Resources. In addition, any spills to the ground that exceed 1,000 gallons are reported. If a discharge of 1,000 gallons or more reaches surface waters, a press release is sent to The Salisbury Post within 24 hours. If a discharge is more than 15,000 gallons, a public notice is placed in The Salisbury Post and The Stanly News and Press (to notify the affected area downstream of Salisbury).

Grants Creek Wastewater Treatment Facility Improvements

The project consists of a new 24 MGD influent screening and pump station structure, new grit removal structure, new RAS/WAS pump station to replace the existing screw pumps, new precast electrical building and new generator, and conversion of the existing trickling filters to provide a flow equalization facility. This project is part of the adopted SRU Capital Improvement Plan. The construction contract amount totals \$26,838,600 and construction is scheduled to be completed in May 2022.

Salisbury-Rowan Utilities (SRU) provides wastewater treatment at the Town Creek treatment train located near Interstate 85 and the Grants Creek treatment train off of Grubb Ferry Road. The effluents at both trains are disinfected with sodium hypochlorite and then the combined effluents from both trains are dechlorinated with sodium bisulfite at the City of Salisbury Wastewater Treatment Plant (WWTP) and discharged into the Yadkin River.

SRU treats industrial, commercial and residential waste from Salisbury, Landis, China Grove, Spencer, East Spencer, Rockwell, Faith and Granite Quarry. Gravity sewer lines, force mains and lift stations collect and pump the wastewater to the treatment trains. An average of 9 million gallons per day is treated using a process called activated sludge. Trash and rags are first removed by bar screens. Heavy particles such as sand and grit settle out as the flow slows in the grit chamber. The wastewater is then pumped to aeration basins, which contain *activated sludge*. The microorganisms or “bugs” feed on the wastewater particles. The process then moves to clarifiers where the “bugs” settle out leaving clear treated wastewater or *effluent*. Sodium hypochlorite is used for disinfection at the City of Salisbury WWTP.

Solids “left over” from the treatment process are separated from the treated effluent by a filter belt press. The solid material or “biosolid” that is left is applied to permitted farmland in Rowan County as a substitute for fertilizer. Only crops grown for animal feed can be raised after biosolids are applied. SRU’s Land Application Program (Permit # WQ001956) land applied a combined total of 1,383.9 dry tons across 295.9 acres of farmland in 2020. Salisbury-Rowan Utilities has a total of 1,005.1 acres of land permitted.

SRU operates a North Carolina certified municipal laboratory where tests are analyzed 5 days per week.



Help Greasy with



DO put grease in a soup can, freeze it and then throw it in the trash can!

DON'T pour grease or cooking oil in the kitchen sink.

DO use a paper towel to wipe out a frying pan, and then put the paper towel and food scraps in the trash.

DON'T use hot water to rinse grease off cooking utensils or eating utensils.

NEVER put any item in the toilet except toilet tissue!

Items like those listed below can cause problems in the lines and treatment plants:

Baby and disinfecting wipes, toilet scrubber sponges, mop refills, paper towels, rags, shop towels, Kleenex, disposable diapers, dental floss, hygiene products, syringes, cotton swabs, razors, surgical gloves, anything plastic, cat litter, cigarette butts, cosmetics, medicines, paint, pesticides, etc.

Please report anyone dumping any type of material into manholes to Environmental Services at 704-638-5375.

It is against the law!

City of Salisbury WWTP (Permit NC0023884)

The City of Salisbury WWTP had the following permit limit violations in 2020:

- February: Grant effluent flow monthly average exceedance of 8.2 mgd (permit limit 7.5 mgd)
- May: Yadkin effluent BOD monthly average exceedance of 15.67 mg/L (permit limit 15 mg/L)
- December: Grant effluent flow monthly average exceedance of 7.7 mgd (permit limit 7.5 mgd)

The WWTP had the following overflows (bypasses) in 2020:

Date	Location	Gallons	Gallons into Stream	Receiving Stream	Cause
2/6/20	Town Creek WWTT (Preliminary Treatment)	61,420	61,420	Town Creek	Severe Natural Condition
2/6/20	Town Creek WWTT (Disinfection)	177,000	177,000	Town Creek	Severe Natural Condition
2/8/20	Grants Creek WWTT (Preliminary Treatment)	24,123	24,123	Grants Creek	Severe Natural Condition
5/21/20	Town Creek WWTT (Preliminary Treatment)	77,918	77,918	Town Creek	Severe Natural Condition
5/21/20	Town Creek WWTT (Secondary Treatment)	184,326	184,326	Town Creek	Severe Natural Condition
5/28/20	Town Creek WWTT (Preliminary Treatment)	55,530	55,530	Town Creek	Severe Natural Condition
5/28/20	Town Creek WWTT (Disinfection)	924	924	Town Creek	Severe Natural Condition
11/12/20	Town Creek WWTT (Preliminary Treatment)	715	715	Town Creek	Severe Natural Condition
11/14/20	Grants Creek WWTT (Preliminary Treatment)	24,123	24,123	Grants Creek	Severe Natural Condition
	Total Gallons	606,079	606,079		

Rowan County Airport recorded 72.17 inches of rainfall for 2020. (the highest recorded since 1929)

N.C. General Statute Chapter 143, Article 21, Part 1, 143-215.1C requires municipalities that operate wastewater collection and treatment systems to publish an annual report summarizing the performances of their collection system and treatment works and the extent to which the system has violated their permit, federal or state laws, regulations, or rules related to the protection of water quality.